RECEIVED
CENTRAL FAX CENTER

FEB 25 2008

Application No. 10/642,197
Attorney Docket: MA-581-US (MAT.023)

AMENDMENTS TO THE CLAIMS:

1. (Previously presented) A node in an Ethernet network to relay an Ethernet frame, comprising:

an element which inserts two or more VLAN tags into said frame and removes an other said inserted VLAN tag in a relay process of said frame.

2. (Currently amended) A node as set forth in claim 1, further comprising:

an element which replaces two or more VLAN tags of said frame at a time.

3. (Currently amended) A node as set forth in claim 1, further comprising:

an element which administrates said two or more VLAN tags using a forwarding table memory for a change of frame contents during a frame relay.

4. (Currently amended) A node as set forth in claim 1, further comprising:

an element which searches a forwarding table memory using an information from two or more VLAN tags in said frame during a frame relay.

5. (Currently amended) A node as set forth in claim 1, further comprising:

an element which searches a forwarding table memory in a relay process of said frame with a combination of an information from two or more VLAN tags in said frame and an input port, a destination MAC address, a source MAC address and a TYPE field information.

6. (Currently amended) A node as set forth in claim 1, further comprising an element which:

provides a TTL area to show a survival time of a frame in said VLAN tag inserted to said frame;

checks whether said survival time has elapsed or not by a value in said TTL area; and

discards said frame after elapse of said survival time without relaying said frame in a relay process of said frame.

7. (Currently amended) A node as set forth in claim 6, further comprising:

an element which decrements the value in said TTL area by one every time said frame is relayed.

8. (Currently amended) A node as set forth in claim 1, wherein

node control information is stored to said VLAN tag.

9. (Currently amended) A node as set forth in claim 1, further comprising:

an element which changes a self-node status administration corresponding to a content of said VLAN tag.

10. (Currently amended) A node as set forth in claim 1, wherein

a node status is stored to an area of said VLAN tag in the relayed frame corresponding to a self-node status.

11. (Previously presented) A frame transfer method of a node to relay an Ethernet frame, said method comprising:

receiving an Ethernet frame in said node;

inserting two or more VLAN tags to said Ethernet frame at a time or removing said inserted VLAN tags; and

forwarding said Ethernet frame.

12. (Previously presented) A frame transfer method as set forth in claim 11, wherein a forwarding table memory for frame contents change during a frame relay is used for administration of said two or more VLAN tags.

13. (Previously presented) A frame transfer method as set forth in claim 11, wherein a forwarding table memory is searched during a frame relay using an information from two or more VLAN tags in said frame.

14. (Previously presented) A frame transfer method as set forth in claim 11, wherein a forwarding table memory is searched in a relay process of said frame with a combination of an information from two or more VLAN tags in said frame and an input port, a destination MAC address, a source MAC address and a TYPE field information.

15. (Previously presented) A frame transfer method as set forth in claim 11, wherein:

a TTL area to show a survival time of the frame is provided in said VLAN tag that is inserted to said frame;

whether said survival time has been elapsed or not is checked by a value in said TTL area; and

said frame after elapse of said survival time is discarded without being relayed in the relay process of said frame.

16. (Previously presented) A frame transfer method as set forth in claim 15, wherein the value in said TTL area is decremented by one every time said frame is relayed.

17. (Previously presented) A frame transfer method as set forth in claim 11, wherein a node control information is stored to said VLAN tag.

18. (Previously presented) A frame transfer method as set forth in claim 11, further comprising:

changing a self-node status administration corresponding to contents of said VLAN tag.

19. (Previously presented) A frame transfer method as set forth in claim11, wherein a node status is stored to said VLAN tag area in the relayed frame corresponding to a self-node status.